

Chemistry 212

SPRING 2014

Welcome to Chemistry 212 for the Spring of 2014. This course is the continuation of Chemistry 211 and will cover many basic principles of chemistry. Topics this semester will include: colligative properties, kinetics, equilibrium, acids and bases, solubility, thermodynamics, oxidation and reduction, nuclear chemistry and an introduction to inorganic and bio-chemistry.

Course Instructor

Prof. William Price
pricew@marshall.edu

482 Science Building
696-3156

Catalog Description

Principles of Chemistry II. 3 hrs. I, II, S. A continuation of Chemistry 211 with emphasis on the inorganic chemistry of the representative elements and transition metals. 3 lec. (PR: C or better in CHM 211; CR: CHM 218)

Office Hours

MW from 12:30 – 2:00 pm. In general, my door is always open. If you cannot make it to the Science Building, or if I have stepped out, I can be reached via email at pricew@marshall.edu

Required Textbook

Gilbert, Kirss, Foster, Davies *Chemistry* 3rd Edition.

SmartWorks

KEY: CHEM35802 (case-sensitive)

Course Objectives

- 1) To become familiar with the vocabulary of modern chemistry.
- 2) To gain insight into the ever-expanding role of chemistry within the context of society, medicine, materials and environment.
- 3) To learn and reinforce logical strategies for solving quantitative problems.

Lecture

Lectures are held Tuesday and Thursday, 4:00 to 5:15 pm in room 473 of the Science Building. While attendance is not mandatory, material for exams will be drawn directly from the lecture and Smartworks homework.

Course Grading Metrics

There will be approximately 11 quizzes, four midterm exams (one midterm will be dropped) and one cumulative final exam. Quizzes will count for 100 points (one quiz will be dropped), midterm exams will constitute 300 points, while the final exam will be worth 100 points. **BONUS:** completion of *SmartWork* homework can result in an extra 25 points. Exam and quiz material will be drawn from the homework, the lecture, and the text. See schedule of tentative exam dates. Missed exams can be made up, with a valid University excuse, on **Friday May 2nd from 12 pm until 2 pm**. If you are planning on making up work on this make-up day you **must** let me know via email by 4 pm Friday, April 25, 2014.

Grading Scale

Cutoffs for grades will be no higher than those listed below, but may be lowered if appropriate.

A		B		C		D		Other
	90		80		70		60	

Policies

The instructor will adhere to the University Policies and Procedures described in the Marshall University General Undergraduate Catalog. The items listed below are of special significance.

Incomplete grade: student must complete 75% of work and exams before he or she is entitled to an incomplete.

Attendance: I strongly encourage you to come to class so that you can more fully understand the material that you will read in the book. If you are absent, obtain the notes from another student or online. In situations where the student is aware of the absence for an exam or quiz in advance arrangement for accommodations must be made prior to the absence. Otherwise, the designation of an absence as excused and any accommodation for that absence will be decided by the Dean of Students. If a student decides to not complete the course, he or she must visit the registrar and complete the appropriate paperwork to remove the course from his or her schedule. The last day to withdraw from a single class is **Friday, March 28, 2014**.

Make-up Quizzes and Exams: There will be no make-up quizzes. Students can miss one quiz without penalty. Any student involved in an official school function or an unavoidable commitment to his or her employer can arrange to take an exam on the make-up date: **Friday May 2nd from 12 pm until 2 pm**.

Electronic Device Policy: All cell phones and pagers must be either turned off or onto vibrate mode during class. Laptops must be turned off and placed on the floor during the lecture period. During examinations, all electronic devices except calculators must be inaccessible. Students **MUST BRING A CALCULATOR** to class for all lectures and exams. Calculators that are part of a cell phone or smart phones are not acceptable for use during an exam or quiz.

Academic Dishonesty Policy: Marshall University's academic dishonesty policy (<http://www.marshall.edu/academicaffairs/Academic%20Dishonesty%20Policy.pdf>) will be enforced.

Policy for Students with Disabilities: Marshall University is committed to equal opportunity in education for all students, including those with physical, learning and psychological disabilities. University policy states that it is the responsibility of students with disabilities to contact the Office of Disabled Student Services (DSS) in Prichard Hall 117, phone 304 696-2271 to provide documentation of their disability. Following this, the DSS Coordinator will send a letter to each of the student's instructors outlining the academic accommodation he/she will need to ensure equality in classroom experiences, outside assignment, testing and grading. The instructor and student will meet to discuss how the accommodation(s) requested will be provided. For more information, please visit <http://www.marshall.edu/disabled> or contact Disabled Student Services Office at Prichard Hall 11, phone 304-696-2271.

* Reading assignments and exam dates are approximate and may be subject to change

@ Homework assignments are tentative, changes will be announced in class

Reading Material

Tentative reading assignments are posted below. To make the most of each class period, reading and SmartWorks assignments should be completed before lecture.

Tentative Course Calendar*

Date	Reading	Notes	Week	Reading	Notes
1: 1/14-1/16	<i>Chapter 10</i> <i>Chapter 11</i>	Review (Forces) Solutions	9: 3/11-3/13	<i>Chapter 17</i>	Equilibrium II
2: 1/21-1/23	<i>Chapter 11</i>	Solutions	10: 3/25-3/27	<i>Chapter 18</i>	Coordination Chem Drop Deadline(3/28)
3: 1/28-1/30	<i>Chapter 14</i>	Thermodynamics	11: 4/1-4/3	<i>Chapter 18</i>	Coordination Chem
4: 2/4	<i>Chapter 15</i>	Thermodynamics	12: 4/8	<i>Chapters</i> <i>17 & 18</i>	Midterm 3
4: 2/6	<i>Chapter 15</i>	Chemical Kinetics	12: 4/10	<i>Chapter 19</i>	ReDox Rxns
5: 2/11	<i>Chapters</i> <i>10, 11 & 14</i>	Midterm I	13: 4/15-4/17	<i>Chapter 19</i>	ReDox Rxns
5: 2/13	<i>Chapter 15</i>	Chemical Kinetics	14: 4/22-4/24	<i>Chapter 21</i>	Nuclear Chemistry
6: 2/18-2/20	<i>Chapter 15</i> <i>Chapter 16</i>	Chemical Kinetics Equilibrium	15: 4/29	<i>Chapters</i> <i>19 & 21</i>	Midterm 4 (optional)
7: 2/25-2/27	<i>Chapter 16</i>	Equilibrium	15: 5/1		Review
8: 3/4	<i>Chapters</i> <i>15 & 16</i>	Midterm 2	15: 5/3	<i>Saturday</i> <i>9:50-11:50</i>	Final Exam
8: 3/6	<i>Chapter 17</i>	Equilibrium II			

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